REMARKS

Applicants respectfully request reconsideration of the present application in view of the foregoing amendments and in view of the reasons that follow.

Claims 1-3, 5-8 and 12-15 have been amended.

This amendment changes claims in this application. A detailed listing of all claims that are, or were, in the application, irrespective of whether the claim(s) remain under examination in the application, is presented, with an appropriate defined status identifier.

After amending the claims as set forth above, claims 1-15 are now pending in this application.

Rejection under 35 U.S.C. § 102

Claims 1-8 were rejected under 35 U.S.C. § 102(b) as being unpatentable over U.S. Patent 5,463,620 to Sriram. ("Sriram"). Applicants respectfully traverse this rejection for at least the following reasons.

Independent claim 1 is directed to a network system for carrying out communication between a control station and a plurality of devices connected to a network and controlled by the control station. Claim 1 recites "wherein the communication includes data communication which requires real-time attributes and message communication which does not require real-time attributes, and wherein the data communication includes a first data communication in which data is transmitted from the control station to the devices and data in response to this transmission is transmitted from the devices to the control station, and a second data communication in which data is transmitted from the control station at a prescribed timing." Thus in claim 1, in the first data communication, data is transmitted from the control station to the devices and data in response to this transmission is transmitted from the devices to the control station, and in the second data communication data is transmitted from the control station at a prescribed timing. Sriram fails to disclose or suggest at least this feature of claim 1.

Sriram is directed to bandwidth allocation and transmission scheduling (title). The scheduling in Sriram is in the context of an asynchronous mode transfer mode (ATM) communications network comprising a plurality of interconnected nodes (See FIG. 1, col. 2, lines 62-65).

In contrast to claim 1, however, Sriram does not disclose any control station that transmits out data to devices, and where in response data is transmitted from the devices to the control station in a first data communication. First, Sriram is not directed to a network with control station and devices controlled by the control station, but merely discloses an ATM communications network with multiple nodes. Second, Sriram does not disclose that one node of his network acts to transmit out data to another node, where in response data is transmitted from the another node to the one node. While Sriram discloses a number of interconnected nodes, Sriram does not disclose or suggest that the nodes are arranged such that one of the nodes functions as a control station, and the remaining nodes are controlled by the control station. Sriram merely discloses generally communications traffic in an ATM communications network.

Independent claims 2-3 and 5-8 all require that the communication between control station and devices includes data communication which requires real-time attributes and message communication which does not require real-time attributes, and that the data communication includes a first data communication in which data is transmitted from the control station to the devices and data in response to this transmission is transmitted from the devices to the control station, and a second data communication in which data is transmitted from the control station at a prescribed timing. Thus, claims 2-3 and 5-8 are patentable for reasons analogous to claim 1, as discussed above.

Moreover, independent claim 1 includes additional patentable features over Sriram. Claims 1 recites "the second data communication transmitting data of a higher priority than the first data communication." In claim 1, the first and second data communications are carried out as follows: "wherein after the data communication is carried out in accordance with a predetermined cycle time, the control means carries out an appropriate switching between the message communication and the second data communication in the remaining

time of the cycle time to complete one cycle." Thus, in claim 1, a data communication is carried out (where the data communication includes data with real time attributes), and then further communication is carried out by switching between message communication data (not having real time attributes) and second data communication data (where the data communication includes data with real time attributes and has a higher priority than the first data communication). Sriram fails to disclose these features of claim 1.

Sriram does not disclose as recited in claim 1, "after the data communication is carried out in accordance with a predetermined cycle time, the control means carries out an appropriate switching between the message communication and the second data communication in the remaining time of the cycle time to complete one cycle", where the first data communication, the second data communication, and the message communication are defined as in claim 1. In Sriram, for a particular cycle, DTS server 48 visits the queues in sequence (col. 5, lines 35-39). Nowhere, however, does Sriram suggest that in a particular cycle the queues are visited first to obtain data for a data communication (where the data communication includes data with real time attributes), and then switches between further queues for message communication data (not having real time attributes) and second data communication data (where the data communication includes data with real time attributes and has a higher priority than the first data communication). In fact, during a particular cycle, Sriram suggests the higher priority data would be removed from the queues first, and thus would not be removed after lower priority data.

With respect to Sriram, the Office Action states on page 3 that "Sriram teaches a low priority (see 74 of figure 7) and a high priority data transmission (i.e., Delay-Sensitive Non-Isochronous High Bandwidth Services) (see column 4, lines 10-26)." While Sriram does disclose that some data has a higher priority than other data, significantly Sriram does not disclose using that priority in determining the communication of the data in the way recited in claim 1. As discussed above, nowhere does Sriram suggest that in a particular cycle the queues are visited first to obtain data for a data communication (where the data communication includes data with real time attributes), and then switches between further queues for message communication data (not having real time attributes) and second data communication data (where the data communication includes data with real time attributes

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and has a higher priority than the first data communication). If the Examiner maintains the rejection of the claims, applicants respectfully request the Examiner to specifically point out where Sriram discloses "after the first data communication is carried out in accordance with a predetermined cycle time, the control means carries out an appropriate switching between the message communication and the second data communication in the remaining time of the cycle time to complete one cycle", where the second data communication data has a higher priority than the first data communication data.

Independent claim 3 recites "wherein after the data communication is carried out in accordance with a predetermined cycle time, the control means carries out an appropriate switching between the message communication and the second data communication in the remaining time of the cycle time to complete one cycle", and thus is patentable for reasons analogous to claim 1.

Moreover, Sriram fails to disclose or suggest as recited in claim 8 "wherein at least one of the transmission queues holds data communication data requiring priority transmission, and at least one of the transmission queues holds both data communication data having a lower priority than the data communication data requiring priority transmission and message communication data." In Sriram, the data of different classification types are stored in separate queues, and thus Siriram does not suggest this feature of claim 8.

The dependent claims are patentable for at least the same reasons as their respective independent claims, as well as for further patentable features recited therein.

Applicants believe that the present application is now in condition for allowance. Favorable reconsideration of the application as amended is respectfully requested.

The Examiner is invited to contact the undersigned by telephone if it is felt that a telephone interview would advance the prosecution of the present application.

The Commissioner is hereby authorized to charge any additional fees which may be required regarding this application under 37 C.F.R. §§ 1.16-1.17, or credit any overpayment, to Deposit Account No. 19-0741. Should no proper payment be enclosed herewith, as by a

check being in the wrong amount, unsigned, post-dated, otherwise improper or informal or even entirely missing, the Commissioner is authorized to charge the unpaid amount to Deposit Account No. 19-0741. If any extensions of time are needed for timely acceptance of papers submitted herewith, Applicant hereby petitions for such extension under 37 C.F.R. §1.136 and authorizes payment of any such extensions fees to Deposit Account No. 19-0741.

Respectfully submitted,

Date ___January 13, 2006___   By ___[signature]___

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